

An Anthology of Applied Computer Technologies

**Zulkefli Muhammed Yusof
M.M Hafizur Rahman**



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Editors

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2. COMPUTERIZED OBSERVATION OF MOTION IN BADMINTON TRACKING SYSTEM

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ABSTRACT

This work presents a sport scene tracking system for badminton using video input where a single player's performance can be analyzed. A player's performance is being tracked in terms of distance, speed and acceleration during a specific event. A color filtering method is applied to filter the video and differentiate between moving and non moving objects. The coordinates from the first frame till the last frame are tracked and applied to get the distance coverage, speed and acceleration of the player. Analysis and comparison of videos between two world champion badminton players were made as a test case.

2.1 INTRODUCTION

Badminton is one of the major sports in the Asian region. China, Indonesia and Malaysia have produced several top world class players. In Malaysia, intensive training and programs are being made for the professional badminton players. It is also important to invest in coaching and training of young talents as preparation for the second and third liners of the country players. This concern has been discussed by various sports relevant parties in the country. With the advent of computer and video technology, training in sports has been upgraded with several facilities for analysis of players' performance. Such analysis tool is useful for any badminton academy in